

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of claims

1. (Currently amended) A ~~[[P]]~~process for the manufacture of spraying, conversion, punching and/or casting tools, as well as prototypes starting from a models, the process characterised by the steps of:

- i. Roughening of ~~the~~ a surface of the model without chemical pretreatment of the surface of the model;
- ii. Applying an intermediate layer of copper or nickel to the surface of the model, the metallic intermediate layer ~~not~~ being applied by a chemical reduction process ~~thermal spraying, CVD, PVD or laser treatment;~~
- iii. Applying a metallic or ceramic coating onto the intermediate layer by thermal spraying; and
- iv. Removing the model from the intermediate layer.

2. (Original) Process according to claim 1 characterised in the coating is backfilled after step iii or iv.

3. (Previously presented) Process according to claim 1 characterised in that the intermediate layer is removed after step iii or iv.

4. (Previously presented) Process according to claim 1 characterised in that the coating exhibits an average thickness of at least 4 mm.

5. (Currently amended) Process according to claim 1 characterised in that the coating exhibits a hardness of at least 35 HRC, ~~in particular of more than 50 HRC.~~

6. (Currently amended) Process according to claim 1 characterised in that the model consists of plastic, ~~preferably of CRP, polyamide, polymer resin, polyethylene, polypropylene, PMMA, GRP, polyvinyl chloride, polystyrene, epoxy resin, polyether ether ketone, polyether imide, polycarbonate, polyphenyl sulphone, polyphenylene sulphide, polyarylamide, polyurea, NBR, SBR, polytetrafluoroethylene or phenol resin.~~

7. (Currently amended) Process according to claim 1 characterised in that the model is made of plastic, ~~preferably~~ by stereolithography, laminated object manufacturing (LOM) or laser sintering.

8. (Previously presented) Process according to claim 1 characterised in that the model is made of wood or paper.

9. (Currently amended) Process according to claim 1 characterised in that the roughening of the surface of the model is carried out with a blasting agent, ~~preferably with silicon carbide with granulation P80.~~

10. (Previously presented) Process according to claim 1 characterised in that the intermediate layer is coated with copper or nickel using a chemical process without electric current.

11. (Currently amended) Process according to claim 10 characterised in that a further metallic layer is applied onto the intermediate layer applied without applying an electric current, ~~in particular by an electrolytic process.~~

12. (Currently amended) Process according to claim 1 characterised in that, onto the metallic layer deposited without electric current, a layer of ~~aluminium~~ aluminum, titanium, or their alloys is applied whose surface is anodically oxidised or ceramics treated.

13. (Currently amended) Process according to claim 12 characterised in that one or several metallic layers are also arranged between the metallic layer deposited without electric current and the layer of ~~aluminium~~ aluminum, titanium, or their alloys.

14. (Currently amended) Process according to claim 12 characterised in that the surface of the article is a ceramic oxide layer of ~~aluminium~~ aluminum, titanium, or their alloys, which layer is coloured black by foreign ion embedments.

15. (Previously presented) Process according to claim 1 characterised in that the model provided with the intermediate layer is positioned and fixed in a frame.

16. (Currently amended) Process according to claim 15 characterised in that the coating is filled or backfilled within the frame, ~~in particular by thermal spraying or easting with an epoxy resin containing metal particles, if necessary, or with aluminium containing foams.~~

17. (Previously presented) Process according to claim 1 characterised in that an alloyed tool steel is applied by thermal spraying.

18. (Currently amended) Process according to claim 1 characterised in that a spraying powder which ~~preferably~~ consists of 30-50 % by weight molybdenum powder and 70-50 % by weight steel powder, ~~in particular of 50 % by weight molybdenum powder and 50 % by weight steel powder~~ is applied by thermal spraying.

19. (New) The process of claim 5, wherein the coating exhibits a hardness of more than 50 HRC.

20. (New) The process of claim 6, wherein the plastic is CRP, polyamide, polymer resin, polyethylene, polypropylene, PMMA, GRP, polyvinyl chloride,

polystyrene, epoxy resin, polyether ether ketone, polyether imide, polycarbonate, polyphenyl sulphone, polyphenylene sulphide, polyarylamide, polyurea, NBR, SBR, polytetrafluoroethylene or phenol resin.

21. (New) The process of claim 9, wherein the blasting agent is a silicon carbide with a granulation of P80.

22. (New) The process of claim 11, wherein the metallic layer is applied onto the intermediate layer by an electrolytic process.

23. (New) The process of claim 16, wherein the coating is filled or backfilled within the frame by a thermal spraying or casting with an epoxy resin containing metal particles, if necessary, or with aluminum -containing foams.

24. (New) Process of claim 18, wherein the spraying powder consists of 50 % by weight molybdenum powder, and 50 % by weight steel powder.